

### **REMARKS**

Claims 1, 2, 4 - 12, 14 - 22 and 24 are pending. By this amendment, claims 1, 11, 18, and 21 are amended and claims 9 and 10 are cancelled. Reconsideration and issuance of a Notice of Allowance are respectfully requested.

On page 2 the Office Action rejects claims 1, 2, 4 - 6, 8 - 12, 14, 15, 17 - 22 and 24 under 35 U.S.C. § 103(a) over U.S. Patent 6,876,988 to Helsper (hereafter Helsper) in view of U.S. Patent 6,816,898 to Scarpelli (hereafter Scarpelli) and further in view of U.S. Patent 7,020,697 to Goodman et al. (hereafter Goodman). On page 13 the Office Action rejects claim 7 under 35 U.S.C. § 103(a) over Helsper, Scarpelli, Goodman and further in view of U.S. Patent 5,949,976 to Chappelle (hereafter Chappelle). On page 14 the Office Action rejects claim 16 under 35 U.S.C. § 103(a) over Helsper, Scarpelli, Goodman and further in view of U.S. Patent 6,647,413 to Walrand et al. (hereafter Walrand). These rejections are respectfully traversed.

### **CLAIM 1, 9 AND 10**

Claim 1 is amended to incorporate all the features of claims 9 and 10 and these claims are cancelled. As amended, claim 1 recites:

wherein the collected service information relates to a plurality of performance metrics ... wherein the generic output comprises a plurality of service health metrics, and wherein the translating step comprises combining one or more of the plurality of performance metrics to provide one or more of the plurality of service health metrics, and wherein the plurality of service health metrics comprises availability, capacity, throughput, service time, queue length, utilization, service level violations, and user satisfaction

Considering claims 9 and 10, now incorporated into claim 1, the Office Action asserts, *inter alia*, that Helsper discloses “the plurality of health metrics comprises availability, capacity, throughput, service time, queue length, utilization, service level violations, and user satisfaction.” In support, the Office Action refers to Helsper at column 10, lines 20 - 30 and 49 - 51, and to Figures 3b - 9A.

NOTHING in Helsper, and certainly not the citations provided in the Office Action, even remotely discloses or suggests user satisfaction as a health metric. In fact, Helsper specifically lists the performance items monitored: available memory, response time, throughput, and query response. See column 11, lines 60 - 65. Thus, Helsper does not disclose or suggest this additional feature of amended claim 1. Moreover, Scarpelli and

Goodman also do not disclose or suggest user satisfaction as a performance parameter. Accordingly, Scarpelli and Goodman fail to correct the defect noted in Helsper.

Considering claim 1, prior to amendment, the Office Action asserts that Helsper teaches all that is recited, including that Helsper teaches, at column 2, lines 42 - 60, "translating the collected service information into a generic output relating to current operational performance of the service" but admits that Helsper does not "explicitly recite 'wherein the generic output is accessible by one of a scriptable interface and an application programming interface.'" The Office Action then asserts that Scarpelli teaches the use of "custom script programs but does not explicitly recite wherein the generic output is actually one of a scriptable interface or an application programming interface." The Examiner then states: "Taking its broadest reasonable interpretation in the art, the output data is interpreted when being translated as being any data type that can be processed by computer means." What point the examiner is making with this statement is unclear. Then, the Examiner states "Goodman teaches wherein data can be translated from specific into a generic API and therefore readable by a plurality of different applications." The Examiner concludes "in view of Goodman, it would have been obvious ... to use a script interface or an application programming interface when the reading in of performance information is necessitated."

Over several Office Action responses, Applicants clearly have demonstrated that Helsper DOES NOT DISCLOSE OR SUGGEST "translating the collected service performance information into a generic output relating to current operational performance of the service." Helsper is directed to a forecasting system that produces near-term predictions of future network performance of e-business systems and system components. However, the output of Helsper's system is not a generic output. Instead, Helsper uses monitoring and forecasting kernels to tailor a concurrent-learning information processor (CIP) to various physical applications. The kernels "may correspond to a spatial configuration of inputs and outputs, a temporal configuration of inputs and outputs, or a combined spatial and temporal configuration of inputs and outputs. As specific examples, a spatial configuration may be tailored to an image processing application, a temporal configuration may be tailored to a commodity price forecasting application ... ." See column 7, lines 53 - 62. Furthermore, Helsper's system includes a self-learning function wherein output features are, over time, transformed "into computed output values in accordance with output feature specifications supplied by the manager." See column 8, lines 39 - 43. Thus Helsper actually teaches away from a generic output - one of Helsper's key features is an output that changes with each monitoring/forecasting cycle.

Scarpelli is directed to a system that collects performance management information. Scarpelli, however, does not cure the defects in Helsper in that Scarpelli does not disclose or suggest a generic output relating to current operational performance of a service, as recited in claim 1. Rather, Scarpelli uses APIs to integrate custom scripts, not generic scripts. See column 4, lines 57 - 60.

Goodman is directed to a computer architecture for a netcentric computing, and more specifically software routines that allow greater flexibility and performance from a distributed computer system. One aspect of Goodman's architecture is computer-telephone integration messaging service 204, which integrates telephone and computer messaging. One function of the service 204 is to provide message mapping. In this regard, the service 204 provides for translating device-specific communications to "generic API and/or message sets." See column 88, lines 10 - 30. Goldman provides no further disclosure to define or suggest the intended purpose of the messages sets. That is, Goodman does not disclose or suggest "useable by different performance monitoring tools."

In contrast to Helsper, Scarpelli, and Goodman, claim 1 recites a "generic output." The feature of the "generic output" is defined in the specification, for example, at page 5, lines 3 - 20:

However the performance information is gathered, the apparatus and method translate the gathered performance information, or metrics, into health metrics. The result is an abstracted set of consistent service health metrics that can be provided to the performance monitoring tools such that the tools may use these metrics without needing to know how the health metrics were derived. This decouples the performance tool implementation from the metric derivation and removes dependencies between the services, their implementation, and the management tool set. For example, a tool may use the generated service level violation metric to generate an alert when violations raise above a threshold. The performance monitoring tools do not need to know anything about the service, its instrumentation, or how the service level metric is calculated. The tool simply compares the resultant metric against its threshold. The performance monitoring tool uses a programmatic interface library call or script interface to access health metrics for all current services. If the underlying application changes, the current version of the performance monitoring tool is unaffected because of this consistent interface. As a result, the system administrator does not necessarily need to install a new version of the performance monitoring tool. Thus, the apparatus and method are extensible without propagating a dependency up into the higher levels of the management software.

Also note page 7, lines 12 - 23:

To solve these problems, a method and an apparatus are used to derive consistent service health measures by combining various instrumentation from both internal sources and external sources that relate to the service under observation. The service

health metrics may be directly measured or derived from the applications, processes and thread instrumentation, for example. The method is independent of specific provider applications and management tool sets, thereby allowing for shorter time-to-market for service management solutions.

The output of the method may be either in the form of a programmatic or scriptable interface to be used by high-level monitoring tools that are capable of reporting status of many disparate computer services. The tools may reside on different systems and architectures and may be supplied by different vendors. To accommodate different performance monitoring tools, the interfaces are generic and flexible.

Finally, note page 13, lines 15 - 17:

The rules set 127 provides algorithms and rules to translate the metrics supplied by the data collection engine 121 into a generic format that is usable by the performance monitoring tools.

As the above-quoted passages from the specification demonstrate, the term “generic output” is an interface that allows the health metrics to be used without any need to know how the health metrics were derived, and that removes any dependencies between the services, their implementation, and the management tool set. As thus defined, the claimed generic output has a specific meaning that is not addressed in Helsper, Scarpelli and Goodman.

On page 4 of the Office Action, the Examiner states; “taking its broadest reasonable interpretation in the art, the output data is interpreted when being translated as being any data type that can be processed by computer means.” What does this mean? Is the Examiner restating an earlier point that a generic output can be any data? (See December 12, 2005 Office Action.) If so, then the modifier “generic” can have no meaning. Instead, the modifier “generic,” given its ordinary dictionary definition, should lead to an interpretation of “generic output” as one that has the characteristics of the entire group of outputs. The “any data type” interpretation has a very different meaning, namely any output, regardless of its characteristics. Furthermore, the doctrine of broadest reasonable construction of a claim term still requires that such interpretation “be consistent with the one that those skilled in the art would reach [and must be] consistent with the specification.” *See In re Cortright*, 165 F.3d 1353, 49 USPQ2d 1464 (Fed. Cir. 1999). Referring back to the passages from the specification quoted above, clearly, the Examiner’s interpretation is neither consistent with the specification nor consistent with that of one of ordinary skill in the art. Thus, the Examiner’s interpretation of “generic output” is improper.

Because Helsper, Scarpelli and Goodman, individually and in combination, do not disclose all the features in amended claim 1, claim 1 is patentable.

### **CLAIM 11**

Independent apparatus claim 11 recites a data analysis engine that translates the collected service health information ... and provides one or more generic health metrics, wherein the generic output comprises a plurality of service health metrics, and wherein the translation data analysis engine combines one or more of the plurality of performance metrics to provide one or more of the plurality of service health metrics, and wherein the plurality of service health metrics comprises availability, capacity, throughput, service time, queue length, utilization, service level violations, and user satisfaction. As noted above, Helsper does not disclose or suggest all of these features. Accordingly, claim 11 also is patentable.

### **CLAIM 18**

Independent method claim 18 recites the step of generating a generic service health output, wherein the generic output comprises a plurality of service health metrics, and wherein the translation data analysis engine combines one or more of the plurality of performance metrics to provide one or more of the plurality of service health metrics, and wherein the plurality of service health metrics comprises availability, capacity, throughput, service time, queue length, utilization, service level violations, and user satisfaction. For the same reasons that claims 1 and 11 are patentable, claim 18 is also patentable.

### **CLAIM 21**

Independent apparatus claim 21 recites service health metrics comprising availability, capacity, throughput, service time, queue length, utilization, service level violations, and user satisfaction. As noted above with respect to claim 1, Helsper, Scarpelli, and Goodman do not disclose or suggest these features. Accordingly, claim 21 is also patentable.

### **DEPENDENT CLAIMS**

Claims 2, 4 - 7 and 8 depend from patentable claim 1; claims 12 and 14 - 17 depend from patentable claim 11; claims 19 and 20 depend from patentable claim 18, and claims 22 and 24 depend from patentable claim 21. For these reasons and the additional features they recite, claims 2, 4 - 8, 12, 14 - 17, 19, 20, 22, and 24 also are patentable. Withdrawal of the rejections of claims 1, 2, 4 - 8, 11, 12, 14 - 22, and 24 under 35 U.S.C. § 103(a) is respectfully requested.

In view of the above amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Prompt examination and allowance are respectfully requested.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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